

Patent Claims:

1-11 (canceled)

12. (new) A gas turbine blade, comprising:
a metallic root portion;
a platform portion; and
an airfoil portion, wherein
the root, platform and airfoil are collectively comprised of a plurality of materials in which at least 40% by volume of the materials have a density of at most 4 g/cm³.

13. (new) The turbine blade as claimed in claim 12, wherein the turbine blade is arranged in a metallic rotor disk.

14. (new) The turbine blade as claimed in claim 12, wherein the turbine blade has a structural metallic core surrounded by a structural ceramic material.

15. (new) The turbine blade as claimed in claim 14, wherein the metallic core is formed at least in part from a metallic foam.

16. (new) The turbine blade as claimed in claim 12, wherein the ceramic material has a non structural ceramic protective layer arranged over the ceramic material.

17. (new) The turbine blade as claimed in claim 12, wherein the length of the turbine blade is at least 50 cm.

18. (new) The turbine blade as claimed in claim 17, wherein the length of the turbine blade is at least 65 cm.

19. (new) The turbine blade as claimed in claim 12, wherein the turbine blade has a metallic skeleton material that functions as a structural frame and is adapted to support a structural ceramic material.

20. (new) The turbine blade as claimed in claim 12, wherein the materials are a ceramic material or a glass material.

21. (new) The turbine blade as claimed in claim 12, wherein the material with the density of at most 4 g/cm^3 is a carbon-containing material.
22. (new) The turbine blade as claimed in claim 12, wherein the turbine blade is at least located in the fourth row of a rotor blade ring of a turbine.
23. (new) A turbine blade, comprising:
a root portion connected to a rotor disk;
a tip portion having a first section located adjacent to the root portion and a second section located adjacent to the first section consisting exclusively of a ceramic material and extending at least 80% of the length of the tip portion.
24. (new) A gas turbine blade, comprised of a material in which at least 40% by volume of the material has a density of at most 4 g/cm^3 .
25. (new) The turbine blade as claimed in claim 24, wherein the turbine blade has a metallic skeleton into which ceramic parts are introduced.
26. (new) The turbine blade as claimed in claim 24, wherein the material with the density of at most 4 g/cm^3 is a ceramic material or a glass material.
27. (new) The turbine blade as claimed in claim 24, wherein the material with the density of at most 4 g/cm^3 is a carbon-containing material.
28. (new) The turbine blade as claimed in claim 24, wherein the turbine blade has a metallic core surrounded by a ceramic material, the metallic core and ceramic material both adapted to provide structural support.
29. (new) The turbine blade as claimed in claim 28, wherein the metallic core is formed at least in part from a metallic foam.
30. (new) The turbine blade as claimed in claim 24, wherein the ceramic material has a protective layer.